

# Low Pathogenic Avian Influenza H5 – H7 (LPAI) in Italy

STANDING COMMITTEE ON PLANTS, ANIMALS,  
FOOD AND FEED

*Section Animal Health and Welfare*

16-17 April 2015

# Epidemiological Situation 2015

- On **24 Jan 2015** a H5N2 LPAI outbreak was detected in a ornamental birds farm in Tuscany (ID 15/0001)
- 81 birds were destroyed and the outbreak was closed on **10 Mar 2015**
- On **6 Feb 2015**, a H5N2 LPAI virus was identified in live decoy birds premise in Veneto (15/0002)
- 39 mallard ducks were culled and the outbreak was closed on **4 Mar 2015**



# 2015 H7N2 LPAI outbreak – Veneto

ADNS Number 15/0003

- On **23 Mar 2015** the National Reference Laboratory confirmed a virological positivity for AI virus for LPAI virus **H7N2** subtype in an rural farm (agritourism) in Verona province
- Control measures:
  - Ban of movement of animals from the infected farm
  - Depopulation
- On **3 Apr 2015** the depopulation procedures ended, and preliminary cleaning activities were performed

# H7N2 LPAI outbreak – Veneto

ADNS Number 15/0003

- Agritourism with **205 birds** of different species
- All the birds present at requisition were culled

Species	Number
Ducks	10
Geese	90
Broilers	40
Peacocks	65
<b>Total</b>	<b>205</b>



# H7N2 LPAI outbreak – Veneto

ADNS Number 15/0003

- Birds were tested in accordance to the Regional Surveillance plan on rural farms
- The samples were taken in a farm holiday
  - Free-range poultry
  - Customers have access to areas where animals are kept
- Other livestock were present in the farm (cattle, horses, and sheeps)
- No poultry farms are located within 1 km from the outbreak
- No contacts with other farms have been identified

# H7N2 LPAI outbreaks – Laboratory analyses

## Phylogenetical analyses of HA gene

- The isolated virus is an H7N2 LPAI strain that clusters with H7 strains circulating in Asia, Ukraine, and Georgia between 2010 and 2013:
  - 96.4% similarity with A/mallard/Repub.of Georgia/3/2010 (H7N3)
  - 95.6% similarity with A/wild duck/Korea/SH 19-47/2010 (H7N9) and A/duck/Bangladesh/14VIR1121-1/2013 (H7N5)
- LPAI strain
- No mutations are present

# HA gene

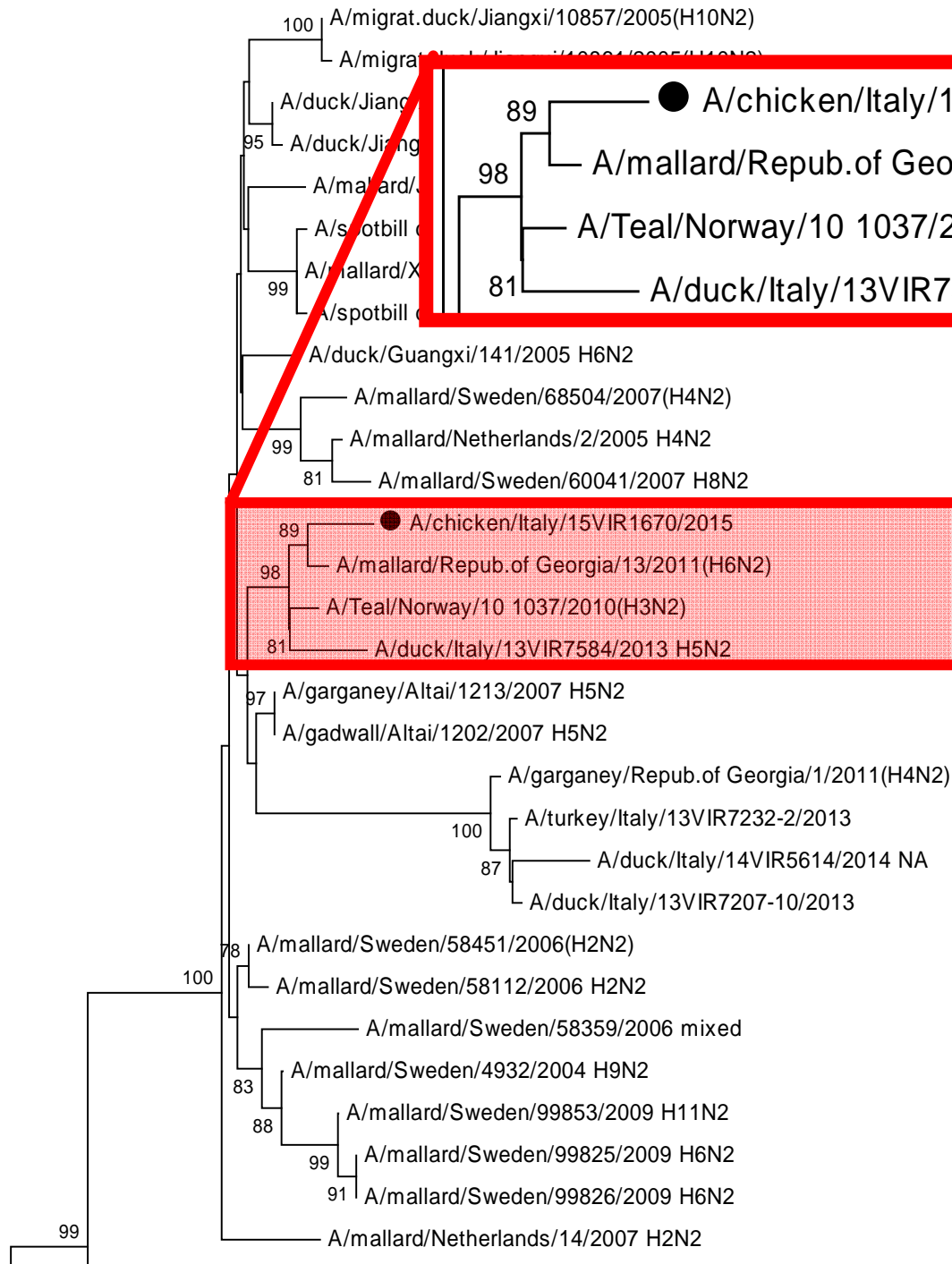


# H7N2 LPAI outbreaks – Laboratory analyses

## Phylogenetical analyses of NA gene

- The virus clusters with strains circulating in Georgia, Italy and Norway between 2010 and 2013, in particular:
  - 99.2% similarity with *A/mallard/Repub.of Georgia/13/2011* (H6N2)
  - 98.5% similarity *A/duck/Italy/13VIR7584/2013* (H5N2)
- No mutations are present





NA gene

# 2015 LPAI outbreaks – Summary

ADNS	Conf. Date	Depop. Date	Ext. Date	Region	Province	Type	Strain
15/0001	24/01/2015	27/01/2015	10/03/2015	Tuscany	Arezzo	Ornamental birds	H5N2
15/0002	06/02/2015	11/02/2015	04/03/2015	Veneto	Venice	Live decoy birds	H5N2
15/0003	23/03/2015	03/04/2015	-	Veneto	Verona	Rural	H7N2

Thanks for your attention